

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A power drive mechanism for power assisted opening and closing of a liftgate pivotally mounted to a motor vehicle, said power drive mechanism comprising:

a linking arm pivotally connectable with the liftgate;

a crank arm pivotally mountable on the vehicle and pivotally connected with the linking arm;

a pivotally mounted gear train;

a drive motor operatively connected with said crank arm through said gear train, said gear train being movable between an engaged position and a disengaged position, said engaged position effecting a driving engagement between the drive motor and the crank arm such that energizing said drive motor drivingly rotates said crank arm to responsively effect said opening and closing of the liftgate and said disengaged position disengages said drive motor from said crank arm permitting movement of said crank arm without backdriving said drive motor;

an actuator operatively connected with said gear train and being operable upon energization to effect said movement of said gear train; and

a holding linkage operatively connected between said gear train and said actuator to maintain said driving engagement once said actuator moves said gear train into the engaged position including after the actuator is deenergized.

2. (currently amended) A power drive mechanism as defined in claim 1 wherein said gear train comprises a plurality of gears rotatably mounted to a bracket assembly in driving engagement with at least each other, said holding linkage comprises a holding link and a connecting link, said holding link pivotally connected with said bracket assembly and said connecting link, said actuator includes a pivotally mounted actuating link pivotally connected to said bracket assembly and said holding link.

3. (cancelled)

4. (currently amended) A power drive mechanism as defined in claim 1 wherein said power drive mechanism further ~~including~~ includes a switch electrically communicating with said actuator and operatively associated with said crank arm such that movement of said crank arm into an open position engages said switch to responsively cause said actuator to move said gear train to said disengaged position.

5. (previously presented) A power drive mechanism as defined in claim 4 wherein said gear train comprises a plurality of gears rotatably mounted to a bracket assembly in driving engagement with at least each other, and a spring biasing said gear train to said disengaged position.

6. (original) A power drive mechanism as defined in claim 5, wherein said crank arm has a sector gear having a series of teeth on an inside circumferential surface thereof, said series of teeth in meshing engagement with at least one of said plurality of gears.

7. (currently amended) A power drive mechanism as defined in claim 6 wherein said power drive mechanism further comprises a fixedly mounted pin and said holding link includes a slot having a holding notch, said holding link slidably receiving said pin in said slot for guiding movement of said holding link, such that said pin is in said holding notch when said holding linkage engages, said holding linkage biased to maintain said engaged position of said gear train, and a mounting bracket on which said crank arm, drive motor, pin and actuator are mounted, said mounting bracket being configured to attach to the vehicle.

8. (previously presented) A power drive mechanism as defined in claim 7 wherein said mounting bracket is diecast utilizing a metal selected from the group consisting of aluminum and zinc.

9. (currently amended) In a motor vehicle having Aa power drive mechanism for providing power assisted opening and closing of a liftgate pivotally mounted on a motor vehicle,

said motor vehicle including a body controller to control operation of said power drive mechanism, said liftgate including a power operated latch assembly capable of latching engagement with a striker on the motor vehicle to releasably latch said liftgate and of power operated unlatching movement, said power drive mechanism comprising:

a mounting bracket mountable on a "D" pillar of said vehicle; a linking arm pivotally connected with the liftgate;

a crank arm pivotally mountable on the mounting bracket and pivotally connected with the linking arm;

a gear train pivotally mounted on said mounting bracket;

a drive motor mounted to said mounting bracket, said drive motor operatively connected with said crank arm through said gear train, said gear train being movable between an engaged position and a disengaged position, said engaged position effecting a driving engagement between the drive motor and the crank arm such that energizing said drive motor drivingly rotates said crank arm to responsively effect said opening and closing of said liftgate and said disengaged position disengages said drive motor from said crank arm permitting movement of said crank arm without backdriving said drive motor;

an actuator operatively connected with said gear train and being operable upon energization to effect said movement of said gear train;

a holding linkage operatively connected between said gear train and said actuator to maintain said driving engagement once said actuator moves said gear train into the engaged position including after said actuator is deenergized;

a switch mounted on said mounting bracket and switchable in response to movement of the crank arm, ~~to sense indicating~~ open and closed conditions of the liftgate; and

an electronic control unit electrically communicating with said body controller, said latch assembly, said drive motor, said switch and said actuator.

10. (currently amended) The motor vehicle of A power drive mechanism as defined in claim 9 wherein said holding linkage comprises a holding link and a connecting link, said holding link pivotally connected with said bracket assembly and said connecting link, said actuator includes a pivotally mounted actuating link pivotally connected to said bracket assembly and said holding link.

11. (cancelled)

12. (currently amended) The motor vehicle of A power drive mechanism as defined in claim 9 wherein said motor vehicle further ~~comprises~~ includes a gas strut assembly linking said liftgate to the vehicle and said electronic control unit de-energizes said drive motor after said liftgate has opened sufficiently to allow said gas strut assembly to continue opening said liftgate.

13. (currently amended) The motor vehicle of A power drive mechanism as defined in claim 9 wherein said gear train comprises a plurality of gears mounted on a bracket assembly in driving engagement with at least one other of said plurality of gears, and a spring biasing said gear train to said disengaged position.

14. (currently amended) The motor vehicle of A power drive mechanism as defined in claim 9, wherein said crank arm has a sector gear having a series of teeth on an inside circumferential surface thereof, said series of teeth in meshing engagement with at least one of said plurality of gears.

15. (currently amended) The motor vehicle of A power drive mechanism as defined in claim 9 wherein said mounting bracket is diecast from a metal selected from the group consisting of aluminum and zinc.